

Applicant: Yao Wang, et al.  
U.S.S.N.: 10/017,304  
Filing Date: December 11, 2001  
EMC Docket No.: EMC-01-201

### REMARKS

This paper is being submitted in reply to the Final Office Action mailed October 19, 2007.

Claims 1-5, 7, 8, 16-18, 20-22 and 24-28 are pending and stand rejected.

Claims 1, 18 and 28 have been amended

#### Rejection under 35 USC 103(a)

The Examiner has maintained the rejection of claim 1-5, 7, 8, 16, 18, 20-22, 24-26 and 28 as being unpatentable over Colby (USP no. 6,449,647) in view of Chiou (USP no. 6,792, 507). In maintaining the rejection of these claims, the Examiner states "step 815 of the instant application refers to the amount of data to be replicated is estimated. The specification does not disclose how the data is estimated (emphasis in original). The prior art Colby teaches that the content-size is used to determine the size of the requested flow and that if a content is "hot" that would mean that a large amount of requests for data is received in a period of time (emphasis in original). It is very clear that Colby utilized the size of data or amount of data to be sent in a period of time. Furthermore, the number of hits or "hot" data would determine the amount of bandwidth the device would need because the device would have to respond to a high level of demands and to keep up with the demands, one would have to monitor those hits so that bandwidth may be allocated during a busy time period. (see OA, page 7, section 27)."

Applicant continues to respectfully disagree with reasons for the rejection of the claims as Colby teaches that the bandwidth is determined based on the data content, i.e., table 1 and not the amount of data to be transferred or copied. Furthermore the use of the number of hits to the data is not comparable to the "period of time in which data is to be copied," as recited in the claims, as the number of hits does not describe a time period but rather a simple count. Colby does not describe that the number of hits is within any particular time period so that the content is deemed "hot."

Notwithstanding the above, the independent claims 1, 18 and 28 have been amended to further recite that the "bandwidth allocation is based on an estimate of the data to be copied, a number of invalid tracks between the first and second data storage systems and the period of time in which the data is to be copied." No new matter has been added. Support for the amendment

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may be found at least on page 56, lines 5-11, which state "[r]eferring to Fig. 17, in step 820, the initial bandwidth requirement is estimated based on the amount of data to be transferred or replicated if that is the case. It may, for example be based on how many invalid tracks or Megabytes exist between the local and the remote storage systems and the amount of time allocated for the replication process as follows (Invalid Tracks \* MB/Time permitted before a Session Timeout is called, yielding MB/unit time, e.g., MB/sec)." (see amendments made in Request for Continued Examination, January 20, 2006).

Colby, as characterized in applicant's prior responses to Official Actions taken by the Office, discloses a method of determining a bandwidth based on data content and the required level of Quality of Service for the particular data content.

Colby however fails to teach determining a bandwidth allocation based on the amount of data to be transferred, the time period in which to transfer the data and the conditions, i.e., number of invalid tracks, between the first and second storage systems, as is recited in the claims.

Chiou fails to provide any teaching regarding basing a bandwidth allocation based on conditions between the two storage systems, as is recited in the claims. Hence, even if the teachings of Colby and Chiou were combined, the combination would not disclose each of the elements recited in the independent claims.

For at least this reason, it is respectfully requested that the rejection of the claims be withdrawn as the invention claimed is patently distinguishable over the combination Colby and Chiou.

With regard to the remaining claims, which ultimately depend from the independent claims, these claims are also allowable by virtue of their dependency upon an allowable base claim.

It is respectfully requested that the rejection of these claims be withdrawn.

In view of the amendments to the claims and for the arguments presented herein, to the Applicant believes that the application is in condition for allowance and respectfully request favorable reconsideration.

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A Power of Attorney is submitted herewith, to allow the attorneys associated with customer number **73901** to represent the applicant in further prosecution of this matter before the Office. Entry of the new Power of Attorney is respectfully requested.

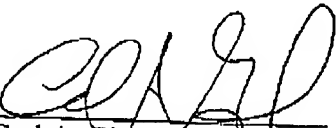
EMC Corporation is the Owner of Record as evidenced by the Assignment of all rights and title in the instant application by the named inventors as recorded at reel/frame **012390/0236**.

No fees are believed necessary for filing this paper. However, if any fees are needed for filing this paper, the Examiner is authorized to charge such fees to deposit account **50-4414**.

In the event the Examiner deems personal contact desirable in the disposition of this case, the Examiner is invited to call the undersigned attorney the telephone stated below.

Respectfully submitted,

Dated: December 19, 2007

  
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Carl A. Giordano, Esq. (Reg. No. 41,780)  
Attorney for Applicants  
Law Office of Carl Giordano  
210 Route 4 East, Suite 103  
Paramus, New Jersey 07652  
(201) 421 0865

Kindly provide all written communications to:  
Carl A. Giordano, Esq.  
Law Office of Carl Giordano  
210 Route 4 East, Suite 103  
Paramus, New Jersey 07652